



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,039	03/04/2002	James Hammer	1342-61338	6479
7590	08/11/2004		EXAMINER	
One World Trade Center Suite 1600 121 S.W. Salmon Street Portland, OR 97204			NGUYEN, THU KHANH T	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/091,039	HAMMER ET AL.	
	Examiner Thu Khanh T. Nguyen	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 28 May 2004.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 40-51 and 53 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-39 and 52 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of group I, claims 1-39 in the reply filed on May 25, 2004 is acknowledged. The traversal is on the ground(s) that the method and the product could not be made by another and materially different apparatus. This is not found persuasive because the method and product as claimed could be made by an apparatus having a vibrator, an upper ram and a lower ram, or a ram and a press plate. Furthermore, the method and product concern about an uncured block, while the apparatus as claimed could be used to emboss the surface of cured adobe blocks, semi-cured adobe blocks, or embossing blocks with different material such as ice blocks or cheese blocks. Claims 40-51 and 53 are withdrawn from further consideration as they are non-elected claims.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-39 and 52 are again rejected under 35 U.S.C. 103(a) as being unpatentable over the JP 2001-191314 (JP'314) in view of the JP 07-052133 (JP'133).

The JP'314 reference disclose a molding apparatus for forming concrete blocks, comprising mold walls (210) and a plurality of partition walls (230) defining a plurality of mold cavities and openings for removing the blocks from the cavities (Fig. 5a-b), wherein the walls

including a plurality of projections (231, 232) for forming a uniform pattern throughout most of the surface (720) of the concrete blocks; and a plurality of mold inserts (240) extended into the mold cavities.

The JP'314 fails to disclose that the projections are tapered or having pyramidal shape and the projections are removable from the mold wall.

The JP'133 discloses a casting mold for precasting concrete material, comprising a mold surface (1) having a plurality of tapered projections (2) to form cone-like projections (§ 0001) all over the main surface of the concrete blocks (§ 0009); the projection can also be a triangle pyramid, a rectangular pyramid, or a hexagon pyramid (§ 0010) and has a slant face with a curved surface of 40-50 degrees to emboss the forming block and to increase the contact surface between the mold and the concrete block to improve the integrity and the shear strength of the concrete (§ 0008 & § 0012). The casting mold (3) also includes a separate layer (4) having a plurality of projections (2) on the surface.

It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the JP'314 by providing a plurality of pyramidal shape projections on the mold surface and the projections are removable from the mold wall as taught by the JP'133, because the slant surface of the pyramidal shape projections would increase the contacting surface between the mold and the concrete material to improve the integrity of the forming concrete blocks; wherein the removable projections on the mold wall would enable the mold to form concrete blocks having different surface patterns.

In regard to the orientation of the projections on the mold surface, it would have been obvious to one of ordinary skill in the art to rearrange the projections on the mold surface to form

a desired embossing pattern on the block surfaces. It has been held that by merely shifting the position of the parts without changing the operation of the mechanism will not render the claims patentable and the placement of the mechanism is an obvious matter of design choice. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950); In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975).

In regard to the slope of the side surface of the projections, it would have been obvious to one of ordinary skill in the art to change the slope of the side surfaces depending on the desired shape of the projections. The JP'133 has recognized that a slant face redistributes the compression force and increase the shear strength (§ 0012-0014); thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the JP'314 by providing a larger slant surface in the compression direction to reduce stress concentration on the surface of the concrete blocks.

#### ***Response to Arguments***

4. Applicant's arguments filed May 25, 2004 have been fully considered but they are not persuasive.
5. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392,

Art Unit: 1722

170 USPQ 209 (CCPA 1971). Further, both Yoshiyuki and Yasuo are related to surface embossing of concrete blocks. One who looks into one reference would more than likely to look at the other reference since they both are in the same technology field.

In response to applicant's argument that the shape of the projections would affect the final surface texture of the block. However, this again is the matter of design choice because the projections shapes are changed in according with the desired final surface texture of the block, and the structure of the wall or the function of the projections does not changed from the prior art. There is no invention in merely changing the shape or form of an article without changing its function except in a design patent. See Eskimo Pie Corp. v. Levous et al., 3 USPQ 23 and In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966)

With respect to claims 9 and 10, the applicant alleged that none of the prior art teaches two generally upwardly facing side surface and two generally downward facing side surface. Yasuo, however, discloses that each of the projection is a regular quadrangular pyramid, which includes four slant surfaces, and each of these surfaces could be understood as an upward or downward facing surface, depending on the reference point. The angle and the size of each slant surface could be changed in according with the desired shape and size of the projection on the surface of the forming block.

In regard to claims 11-19, the applicant asserted that none of the references discloses an interior surface includes rows of projections positioned side-by-side in each row, with each projection having a respective base that adjoins a base of an adjacent projection in the same row. This structure is clearly shown in Figures 1a, 2a-b of the Yasuo reference, each of the projection

is a pyramid having a base adjoin with the base of the next projection. All projections are aligned in adjacent rows and columns.

In regard to claims 20-28, the Applicant have recited the limitations of the claims, but fails to indicate how the claims would not be obvious in view of the prior art. Therefore, the rejections are still deemed proper.

In regard to the orientation of the projections, it would have been obvious to one of ordinary skill in the art to rearrange the projections on the mold surface in order to form a product having different projections design. It has been held that by merely shifting the position of the parts without changing the operation of the mechanism will not render the claims patentable and the placement of the mechanism is an obvious matter of design choice. In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950); In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975). On page 8 of the specification, the Applicants have described different projection orientations, which indicates that the orientation of the projections are design of choice and could be rearranged based on the desired product.

The Applicant have repeatedly asserted that Yasuo and Yoshiyushi teach away from each other, in which Yasuo teaches increasing contacting surface and Yoshiyushi teaches minimizing the contact area. However, these references are related to two different things. While in Yoshiyushi having tapered mold walls to facilitate the removal of the product from one end to the other, the tapered wall does not really teach minimizing the contact area. If the contact area between the block and the projections are limited, the blocks will not be formed properly. The material could get loose and the formed projections on the block surface would not replicate the shape of the projections on the mold wall. Yasuo, on the other hand, teaches that the projections

having slant surfaces to increase the contacting surface at each projection so that less compression force is required. Thus, Yasuo and Yoshiyushi concern about two different limitations, and these limitations are not teaching away from each other.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

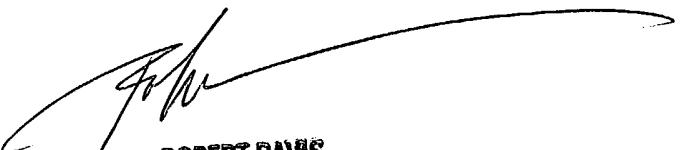
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN



ROBERT DAVIS  
PRIMARY EXAMINER  
GROUP 1300 1700  
8/6/09